

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IB2004/002493

International filing date (day/month/year)
16.07.2004

Priority date (day/month/year)
16.07.2003

International Patent Classification (IPC) or both national classification and IPC
F23Q2/16

Applicant
SWEDISH MATCH LIGHTERS B.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

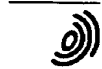
If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/002493

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. ☐ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

4. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-18
	No: Claims	19-21
Inventive step (IS)	Yes: Claims	1-18
	No: Claims	19-21
Industrial applicability (IA)	Yes: Claims	1-21
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

**WRITTEN OPINION OF THE
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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V.

1 The following documents are referred to in this communication:

D1 : US 6 086 358 A

D2 : US 6 287 109 B1

2 INDEPENDENT CLAIMS 1,2,5,10,12 19

2.1 D2 discloses a piezoelectric lighter including a casing (1), a fuel reservoir (2), a valve (14) operable by a user for releasing fuel from the reservoir, a piezoelectric device (4) for igniting the fuel and a first control element (15a) .

The first control element (15a) is normally biased to a rest position (see column 5, lines 1-5) and is displaceable by the user to a first direction to impart an actuating motion to the piezoelectric device (4).

The lighter includes an intermediate member or engaging means (15b) for transferring the actuating motion from the first control element (15a) to the piezoelectric device (4).

The first control element (15a) also acts as an enabling means (15a) operable by the user to move the intermediate member (15b) in a second direction from a normal disabled position (wherein on displacement of the first control element in the first direction, the actuating motion is not transferred to operate the piezoelectric device, see column 4, lines 28-46) to an enabled condition (wherein the on displacement of the control element in the first direction, the actuating motion is transferred to the piezoelectric device, see column 4, lines 46-49).

2.2 The subject-matter of claims 1 and 2 differs from the disclosure of D2 in that the intermediate member has two ends, one being fixed and the other being movable with regard to one another in the second direction (whereas D2 discloses a rigid intermediate member (15b)).

2.3 The subject-matter of claim 5 differs from the disclosure of D2 in that the intermediate member is a separate element mounted independently from the first control element and from the piezoelectric device (whereas D2 discloses a intermediate member (15b) which is attached to the control element (15a)).

2.4 The subject-matter of claim 10 differs from the disclosure of D2 in that the engaging means transfers the actuating motion to the piezoelectric device with a frictional engagement surface (whereas D2 discloses an engaging means (15b) transmitting the actuating motion with a direct pushing action).

2.5 The subject-matter of claim 12 differs from the disclosure of D2 in that the intermediate member is a flexible element, the distance between its two ends being variable when its intermediate section is displaced in the second direction (whereas D2 discloses a rigid intermediate member (15b)).

2.6 These features being neither known nor rendered obvious by the available prior art, independent claims 1,2,5,10,12 can be regarded as new and inventive with regard to Articles 33(2) and (3) PCT.

2.7 D1 discloses a piezoelectric lighter including a casing, a fuel reservoir, a first control element (4) and two operating elements comprising a valve (3) for releasing fuel from the reservoir and piezoelectric spark generating device (14).

The first control element (4) is normally biased to a rest position (see column 7, lines 55-58) and is displaceable by the user to a first direction to impart an actuating motion to said operating element (3).

The lighter further includes enabling means (5) operable by the user to set the lighter from a normal, disabled position (wherein on displacement of the first control element in the first direction, the actuating motion is not transferred to operate the operating component (3), see column 8, lines 44-56) to an enabled condition (wherein the on displacement of the control element in the first direction, the actuating motion is transferred to the operating component (3), see column 8, line 60, to column 9, line 3).

Moreover, the lighter is set to the enabled condition by continuous operation of the enabling means during displacement of the first control element in the first direction (see column 8, lines 61-67).

Disengagement means (9) are also provided, wherein when the operation of the enabling means is interrupted during displacement of the first control element in the first direction, the disengagement means (9) returns the lighter to the disabled condition (see column 9, lines 4-9).

2.8 The subject matter of claim 19 can therefore not be considered as new in the sense of Article 33(2) PCT.

3. DEPENDENT CLAIMS

3.1 The additional subject-matter of dependent claims 20-21 is already known from D1 (see column 8, line 44, to column 9, line 15).

3.2 Claims 3,4,6-9,11,13-18 fulfill the requirements of Articles 33 (2) and (3) PCT with regard to novelty and inventive step since they are dependent on claims 1,2,5,10,12

Re Item VII.

4. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

Re Item VIII.

5. The embodiment of the subject-matter of claim 5 described in figure 4 is in contradiction with the subject-matter of claim 6, since it still allows the operating means (52) to set the intermediate members (60) in its enabled position even after a stroke on the first control element (30). Claim 6 being formally dependent of claim 5, this situation generates a contradiction between the claims and the description and prevents therefore claim 6 from meeting the requirements of Article 6 PCT.

6. It is clear from the description (see page 28, line 29 to page 10, line 13) that the following feature is essential to the definition of the invention:

The second frictional engagement surface mentioned in claim 10 has to be linked to the

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AUTHORITY (SEPARATE SHEET)**

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operating component (piezoelectric device (20)).

Since independent claim 10 does not contain this feature, it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.